IN THE WRITTEN DESCRIPTION

In the written description kindly amend as follows:

Kindly AMEND line 15, page 1 as follows:

The R-tree is an object hierarchy that is applicable to arbitrary spatial objects ~~that is~~ and formed by aggregating minimum bounding boxes for the spatial objects and storing the aggregates in a tree structure.

Kindly DELETE paragraph 1 (first full paragraph), page 52.

~~A method for determining relationships among objects represented in a database. At least one interior rectangle that lies entirely within the first geometry is defined. A minimum bounding rectangle for the first geometry is defined. A minimum bounding rectangle for a second geometry is defined. The minimum bounding rectangle for the first geometry is compared with the minimum bounding rectangle for the second geometry to determine if the second geometry fulfills a primary filter condition comprising an interaction of the first geometry and the second geometry. If the second geometry fulfills the primary filter condition it is determined whether the second geometry fulfills an intermediate filter condition including an interaction of the first geometry and the second geometry by analyzing the distribution of the second geometry with respect to the at least one interior rectangle within the first geometry. It is determined whether the second geometry fulfills the secondary filter condition by comparing the second geometry with the first geometry if the second geometry fulfills the primary filter condition but is not confirmed as fulfilling the secondary filter condition based upon the distribution of the second geometry with respect to~~

~~the at least one interior rectangle.~~

Kindly Amend paragraph 1, page 37 as follows.

Figs. 13(a) and 13(b) illustrate the results for different tiling levels. The tiling level is plotted along the x-axis and the query response time along the y-axis. For small tiling levels, such as 2 or 3, the number of interior tiles is also small and, hence, the performance improvements will be negligible. As the tiling level increases from 3 to 4, or 4 to 5 as shown in Fig. 13(a), the number of interior tiles and the tiling time increase and may offset any gains in response time due to acceptance of interior candidates. The example was searching for any interaction.

Kindly REPLACE deleted paragraph 1, page 52 as follows:

To determine relationships among objects represented in a database at least one interior rectangle lying entirely within a first geometric shape is define. A minimum bounding area for the first geometry and a minimum bounding area for a second geometry are defined and compared with one another to determine if the second geometry fulfills a primary filter condition of an interaction between the first and second geometries. Based on the fulfillment of the primary condition by the second geometry, it is determined whether an intermediate filter condition of interaction between the first and second geometries is fulfilled by analyzing the distribution of the second geometry with respect to at least one interior rectangle within the first geometry. It is determined whether the second geometry fulfills a secondary filter condition by comparing the second geometry with the first geometry

if the second geometry fulfills the primary filter condition.

48

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